Amendments to the Claims

This listing of claims replaces prior versions:

Claim 1 (currently amended): An ultra-lightweight electromagnetic wave concentrator comprising a thin-film curved body that is molded by the effect of stress relaxation in a thin-film material and has a reflective surface that assumes the surface shape that is part of a paraboloid of revolution or of a curved surface modeling the same, wherein a reinforcing groove structure is formed at least in the peripheral zone of said reflective surface and the reinforcing groove structure is molded in said reflective surface to increase the rigidity of said thin-film curved body.

Claim 2 (previously presented): The ultra-lightweight electromagnetic wave concentrator according to claim 1, wherein said reinforcing groove structure is molded by said effect of stress relaxation simultaneously with the molding of said thin-film curved body with said thin-film materials.

Claim 3 (canceled)

Claim 4 (currently amended): The ultra-lightweight electromagnetic wave concentrator according to claim [[3]] 1, wherein said reinforcing groove structure is formed in radially extending linear configuration or ring-like concentric configuration.

Claim 5 (previously presented): The ultra-lightweight electromagnetic wave concentrator according to claim 1, wherein said reinforcing groove structure is formed in the shape of ridge or groove.

Claim 6 (previously presented): The ultra-lightweight electromagnetic wave concentrator according to claim 1, wherein a reinforcing agent is coated or arranged over the entire or part of said reinforcing groove structure, or over the entire or part of the back side of said reflective surface.

Claim 7 (withdrawn): A method for the manufacture of an ultra-lightweight electromagnetic wave concentrator comprising the steps of:

heating a thin-film material in a state in which the thin-film material is attached to a molding die under pressure and molding the thin-film material into a thin-film curved body by the effect of stress relaxation in the thin-film material; and

forming a reflective surface that assumes the surface shape which is part of a paraboloid of revolution or of a curved surface modeling same, and a reinforcing structure formed in the peripheral zone of said reflective surface on the surface of said thin-film curved body by the molding surface of said molding die.

Claim 8 (withdrawn): The method for the manufacture of an ultra-lightweight electromagnetic wave concentrator according to claim 7, wherein said reinforcing structure is molded by said effect of stress relaxation simultaneously with the molding of said thin-film materials.

Claim 9 (withdrawn): The method for the manufacture of an ultra-lightweight electromagnetic wave concentrator according to claim 7, wherein the reinforcing structure is formed in said reflective surface simultaneously with the molding by the effect of stress relaxation in said thin-film material.

Claim 10 (withdrawn): The method for the manufacture of an ultra-lightweight electromagnetic wave concentrator according to claim 7, further comprising a step of coating a reinforcing agent or arranging a reinforcing material over the entire or part of said reinforcing structure or over the entire or part of the back side of said reflective surface.

Claim 11 (withdrawn): The method for the manufacture of an ultra-lightweight electromagnetic wave concentrator according to claim 7, wherein said molding surface of said molding die is formed as a surface obtained by adding the return corresponding to the elastic deformation causing the return of the thin-film material to its original shape when the pressure attaching said thin-film material to said molding die is released to the shape of the surface comprising said surface shape which has to be assumed by the thin-film curved body.

Claim 12 (withdrawn): The method for the manufacture of an ultra-lightweight electromagnetic wave concentrator according to claim 7, further comprising a step of conducting an adjustment matching said reflective surface of said thin-film curved body with said surface shape by adjusting the temperature of said molding die.